

Abstract of the Disclosure

There is provided an optical system of an optical pick-up for recording/reproducing data to/from at least two types of optical discs including a first optical disc and a second optical disc whose recording density is higher than that of the first optical disc. The optical system is provided with a light source unit for the first and second optical discs, an objective lens, and a photo detector. The optical system further includes an optical surface to satisfy compatibility between the at least two types of optical discs, the optical surface being located between the light source unit and one of the at least two type of optical discs. The optical surface has an inner region having a numerical aperture for the first optical disc, an outer region located having a numerical aperture for the second optical disc, and an intermediate region that is located within the outer region at a periphery of the inner region. Transmissivity for a light beam having a wavelength suitable for the first optical disc in the intermediate region is lower than that in the inner region.